

REMARKS

Claims 1-2 are pending in the present application. Claims 1 and 2 have been amended. Claims 3-5 were previously cancelled in accordance with a Response to Restriction Requirement filed November 7, 2002. Claims 6-10 have been added. No new matter is added. The rejections are respectfully traversed in light of the amendments and following remarks, and reconsideration is requested.

Claims 1 and 2 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Aumont et al. (U.S. Patent No. 6,048,034 hereinafter "Aumont") in view of Pajon et al. (U.S. Patent No. 6,050,635 hereinafter "Pajon"). In particular, the Examiner writes in part:

Aumont et al. discloses a vehicle occupant restraint system provided in association with a vehicle seat (1) comprising a pair of fixed support members (9) attached to either side of a seat frame (4) at a front part (unlabeled) of a seat bottom (3); an arm (5) pivotally attached to a front end (unlabeled) of each of said fixed support members (9); and a cross member (10) extending between free ends (unlabeled) of arms (5). Aumont et al. also discloses how tilt adjustment means, including an inertia wheel (21) and linkage 920), "could be replaced with any other control means and especially by electric [i.e. power] actuators" (column 8, lines 304). Aumont et al. discloses all claimed elements with the exception of a cross member comprising an energy absorbing structure that further comprises a relatively deformable member.

Pajon et al. teaches the use of a cross member (5) with an "energy dissipation means consist[ing] of a cellular foam cushion (11) placed on cross member (5)" (column 5, lines 41-42).

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to add the energy absorbing structure (11) taught by Pajon et al. to the cross member (1) revealed by Aumont et al. Such an addition would ensure that the cross member (1) is able to absorb "the thrust exerted by the user's pelvis" (column 5, line 45) during an impact situation. Absorption of this force will help "avoid exaggerated compression of the lumbar region" (column 5, line 52).

Applicants submit that Aumont does not disclose the limitations as suggested by the Examiner. Aumont discloses that a seat 1 "is attached to the floor of the automobile vehicle

by means of two slides 4 which enable a longitudinal adjustment of the position of the seat.” (Aumont, col.4, ll.30-34; FIGS. 1-3). Aumont does not disclose or suggest a seat frame 4.

Furthermore, Aumont discloses that “the height adjustment means control, located on one side of the seat pan, includes a lever 11” (Aumont, col.4, ll.61-63) and that the “tilt adjustment control . . . includes a lever 15.” (Aumont, col.5, ll.15-16). Aumont further discloses that “the manual controls of the tilt adjust means and of the height adjustment means . . . could be replaced by any other control means and especially by electric actuators.” (Aumont, col.8, ll.1-4). “If electric actuators are used, an electric motor could control the pivoting of the inertia reel The electric motor could be of the step type so as to accurately control the angular position of the shaft of the motor to pivot the inertia reel.” (Aumont, col.8, ll.10-17). Thus, Aumont discloses electric controls that a user operates to adjust the tilt and height of a seat for user comfort. (See Aumont, col.1, ll.48-55). Aumont does not disclose or suggest a power unit for use in an impact situation.

In contrast, Applicants disclose that a “seat bottom 1a comprises a seat frame 4 which in this case consists of a rectangular frame having a pair of longitudinal side members and a pair of cross members joining the front and rear ends of the side members with each other, and a cushion member 5 which covers the seat frame 4.” (Specification, page 5, lines 7-10). Applicants further disclose that a “pair of subassemblies 2 and 3 forming a vehicle occupant restraint system according to the present invention are attached to the inner sides of the side members of the seat frame 4.” (Specification, page 5, lines 11-14). Thus, Applicants disclose that the seat frame and vehicle occupant restraint subassemblies are within the cushion member.

Furthermore, Applicants disclose a “power unit comprising a cylinder unit 22 extending in a fore-and-aft direction and a piston rod 23 extending from a front end of the

cylinder unit 22 is received in the casing 6.” (Specification, page 6, lines 10-12). “When an impact of a vehicle crash is detected, gas is produced in the cylinder unit 22, and the resulting rapid rise in the internal pressure inside the cylinder member 72 produces a thrust which pushes the piston member 71 out of the cylinder member 72 causing the free end of the piston rod 23 to project rapidly.” Thus, Applicants disclose a power unit for use in an impact situation.

Accordingly, Applicants submit that Aumont does not disclose or suggest “a pair of fixed support members attached to either side of a seat frame at a front part of a seat bottom; an arm pivotally attached to a front end of each of said fixed support members” and “a power unit provided in association with at least one of said support members for actuating said arms and cross member upward so as to selectively raise a front part of said seat bottom in an impact situation such as a vehicle crash” as recited in independent Claims 1, 8, and 10.

Furthermore, Applicants submit that one of ordinary skill would not combine the cushion 11 as taught by Pajon to the connecting bar 10 revealed by Aumont. As shown by FIGS. 2 and 3 of Aumont, connecting bar 10 is used in conjunction with other structure to adjust the height and tilt of the entire seat bottom 3 (shown by dashed lines). Aumont does not disclose or suggest that connecting bar 10 protrudes out of the seat bottom or otherwise functions to engage the thighs of a vehicle occupant. Thus, there is no need for a cushion to be combined with the connecting bar 10 of Aumont. Accordingly, there is no motivation to combine Pajon with Aumont to absorb “the thrust exerted by the user’s pelvis” and “avoid exaggerated compression of the lumbar region.”

Furthermore, Applicants submit that Aumont and Pajon, alone or in combination, do not disclose or suggest “a pipe member including a feature for controlling a mode of deformation of said pipe member,” as recited in claim 1, or “a pipe member having a flattened

surface for engaging the vehicle occupant," as recited in Claim 8, or "a pipe member adapted to undergo a controlled deformation under a load occurring as said front part of said seat bottom is raised, and further wherein a relatively deformable member is included inside said pipe member," as recited in Claim 10.

Therefore, because Aumont and Pajon, alone or in combination, do not disclose or suggest all the limitations as recited in Claims 1, 8, and 10, and because Aumont and Pajon are not properly combinable, Claims 1, 8, and 10 are patentable over Aumont in view of Pajon.

Claims 2 and 6-7 are dependent on Claim 1 and contain additional limitations that further distinguish them from Aumont in view of Pajon. Claim 9 is dependent on Claim 8 and contains additional limitations that further distinguish it from Aumont in view of Pajon. Therefore, Claims 2, 6-7, and 9 are patentable over Aumont in view of Pajon for at least the same reasons provided above with respect to Claims 1 and 8.

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CONCLUSION

For the above reasons, Applicants believe pending Claims 1-2 and 6-10 are now in condition for allowance and allowance of the Application is hereby solicited. If the Examiner has any questions or concerns, the Examiner is hereby requested to telephone Applicants' Attorney at (949) 752-7040.

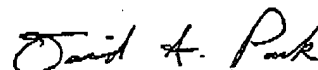
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